

transmitting information signals from said nodes with a hierarchical transmission sequence including the step of starting transmission of said information signals so that said information elements are independent of any one of said nodes and wherein said starting transmission has a start time which is solely a function of said hierarchal transmission sequence.

6. Process according to claim 5, wherein the transmission start time for an information element for a predetermined node is set to be later than when said predetermined node had previously received an information element from another one of said nodes.

7. Process according to claim 5, further comprising the step of setting a delay time for each node within one cycle of said transmission sequence wherein the length of said delay time is complimentary to a signal transit time between a predetermined node and said data bus.

8. The process according to claim 5, wherein the delay time is a function of the type of connection between a node and the data bus.

9. A system for providing communication between a data bus and a plurality of nodes wherein said nodes are connected to each other through said data bus;

a light guide for connecting at least one of said nodes to said data bus;

means for providing synchronizing pulses to synchronize the operation of said at least one node when information elements are transmitted from said nodes with a hierarchical transmission sequence;

adaptation element for providing start time points of said information element whereby said start time points are independent of any one node and are only a function of said transmission sequence.

10. The system according to claim 9, wherein said adaptation elements further set a transmission time for an information element when a predetermined node has previously transmitted and wherein said transmission time point is set later than when said predetermined node previously received an information element from another node.

11. The system according to claim 9, wherein said adaptation elements set a delay time for each cycle of transmission sequence for each node wherein the length of said delay time is complimentary to the signal transit time between each node and the data bus.

12. The system according to claim 11, wherein the delay time is a function of the type of connection between a node and the data bus.--